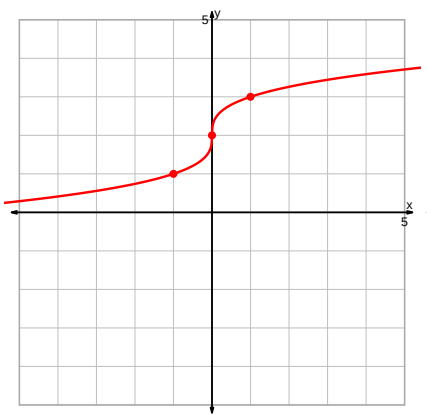
NAME: DATE:

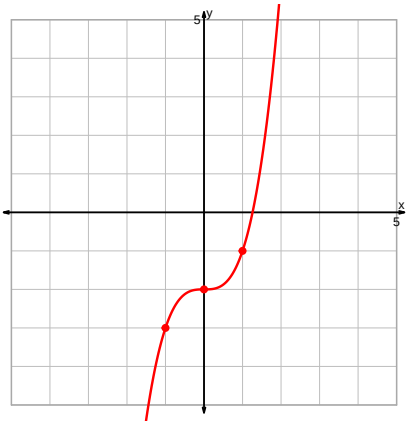
Unit-2 Reduced Mastery Assessment (version 318)

Question 1 (20 points)

Graph the equations accurately. For each integer-integer point on the parent, indicate the corresponding point precisely. Also, with dashed lines, indicate any asymptotes.

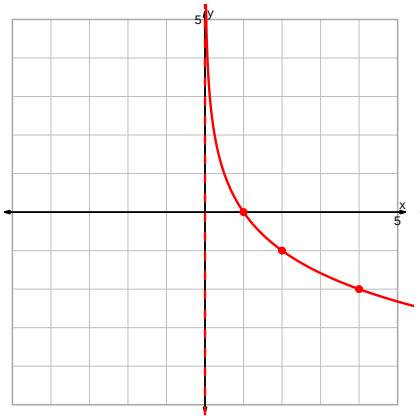
$y = \sqrt[3]{x} + 2$

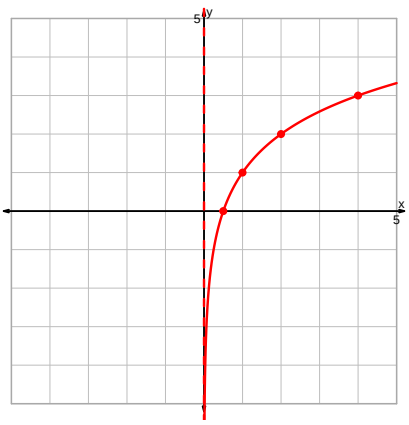




$y = x^3 - 2$

$y = -\log_2(x)$

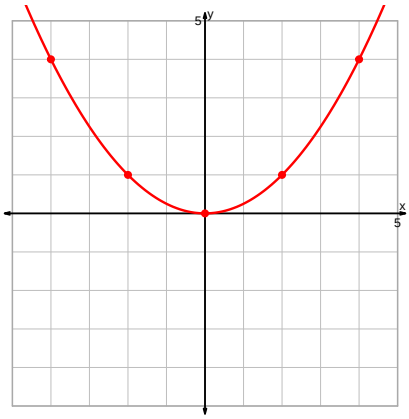


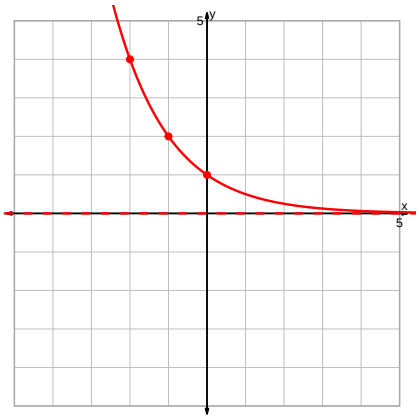


$y = \log_2(2x)$

Question 2 continued. . .

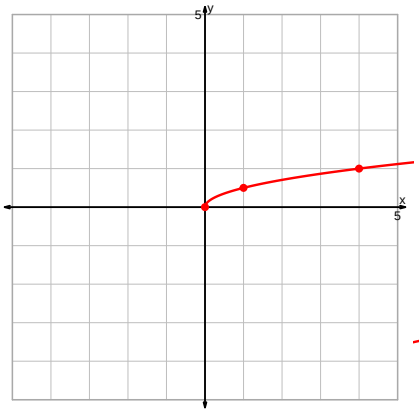
$y = \left(\frac{x}{2}\right)^2$

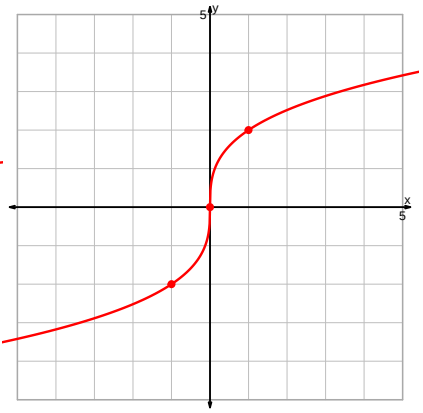




$y = 2^{-x}$

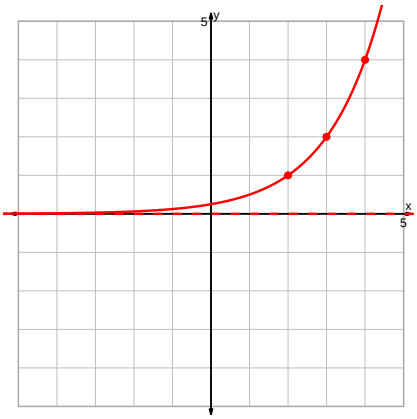
$y = \frac{\sqrt{x}}{2}$

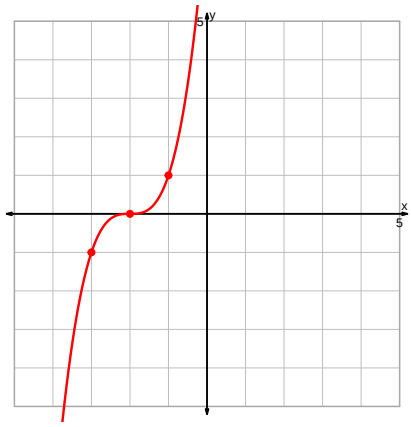




$y = 2 \cdot \sqrt[3]{x}$

$y = 2^{x-2}$

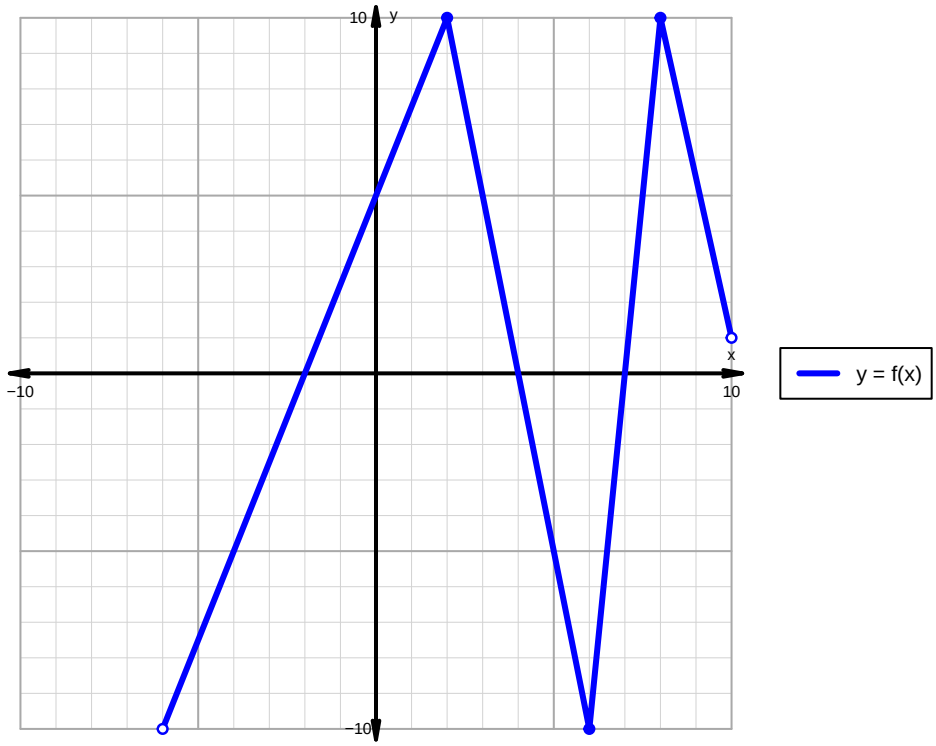




$y = (x+2)^3$

Question 2 (20 points)

A function is graphed below.



Indicate the following intervals using interval notation.

Feature	Where
Positive	$(-2, 4) \cup (7, 10)$
Negative	$(-6, -2) \cup (4, 7)$
Increasing	$(-6, 2) \cup (6, 8)$
Decreasing	$(2, 6) \cup (8, 10)$
Domain	$(-6, 10)$
Range	$(-10, 10)$